

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PAPER NUMBER

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

09/990,651 11/21/2001 Roger Moulton SOU747/4-3 US 3666

7590 07/05/2005 EXAMINER

Thomas w. Adams PHASGE, ARUN S

Thomas w. Adams
Renner, Otto, Boisselle & Skiar, LL P.
1621 Euclid Avenue
Nineteenth Floor
Cleveland, OH 44115

1753

DATE MAILED: 07/05/2005

ART UNIT

Please find below and/or attached an Office communication concerning this application or proceeding.

M_{Λ}			
	Application No.	Applicant(s)	ν
Office Action Summary	09/990,651	MOULTON, ROGER	
	Examiner	Art Unit	
	Arun S. Phasge	1753	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status	•		
1) Responsive to communication(s) filed on	_ ∙		
2a) ☐ This action is FINAL . 2b) ☑ This	action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
 4) Claim(s) 1-49 is/are pending in the application. 4a) Of the above claim(s) 19,20,28,36,44 and 49 is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 			
Application Papers			
9) The specification is objected to by the Examine	r.		
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 			
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:		

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in the reply filed on 4/20/05 is acknowledged. The traversal is on the ground(s) that it would be no more burdensome to consider the product claims with the process claims, since they are alleged to be closely related to the process by which they are produced. This is not found persuasive because as demonstrated in the prior Action, the product claims would be the same even if made by a different method.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC \$ 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Application/Control Number: 09/990,651

Art Unit: 1753

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-10, 12 -18, 21-27, 29-35, 37-43, 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moulton, U.S. Patent 5,951,845 in view of Jeapes et al. (Jeapes), WO 01/15175.

The Moulton patent disclose the claimed process for preparing an organic liquid in an electrochemical cell having anode and cathode and dividers as claimed comprising the steps of feeding the cell with a first solution comprising the Onium hydroxide and an acid solution in the acid compartment and would produce the ionic liquid in solution, wherein the onium has the same cation and anion (see col. 4).

The reference while disclose the formation of the organic compound does not disclose the recovery of the ionic liquid by means such as, distillation or evaporation. The Jeapes patent is cited to show the conventional technique used in the art to purify and/or concentrate the ionic liquid, such as distillation and heating which would cause evaporation (see abstract and claims 3-17).

Consequently, the invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the

Art Unit: 1753

disclosure of the Moulton patent, with the teachings of the Jeapes reference, because the Jeapes reference discloses the conventional steps used in the art to purify ionic liquids.

Allowable Subject Matter

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record fairly disclose or render obvious the formation of BMIM acetate, nitrate or triflate by electrolysis.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arun 5. Phasge whose telephone number is (571) 272-1345. The examiner can normally be reached on MONDAY-THURSDAY, 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam X. Nguyen can be reached on (571) 272-1342. The fax

Application/Control Number: 09/990,651

Art Unit: 1753

Page 5

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Arun 5. Phasge
Primary Examiner
Art Unit 1753

asp